

# Driving Transformation

*2012 Technology, Services, & Innovation  
Annual Performance Report*



# Our Customers' Perspective

*“The media business is one of the most dynamic, challenging industries of our day. The choice is simple: change, innovate, adapt - or die. TSI has been an agency leader in driving new thinking and seeking creative, forward-leaning solutions to long-standing challenges, while continuing rock-solid support for our ongoing operations and legacy platforms.”*

**Richard Lobo, Director of the International Broadcasting Bureau**  
**Jeffrey Trimble, International Broadcasting Bureau Deputy Director**

*“In the past year TSI has provided invaluable support to the Marti’s in the areas of IT, engineering, telecommunications and day-to-day technical operations. TSI’s Internet Anti-Censorship group has given funding and consultation needed to support our continued focus in exploring methods to enable our audience to overcome state-imposed censorship of websites, e-mails, and text messages. Their Systems Engineering group also is currently assisting OCB in exploring additional ways of delivering Radio Marti programming to Cuba, including a possible medium wave transmission facilities in Haiti and building a new FM transmission operations at our Marathon Transmitter Station. And equally important, TSI’s Greenville Relay Station continues to provide us uninterrupted service by reliably delivering the Radio Marti program signal to Cuba via shortwave. TSI’s NCC group also has supported us with the day-to-day management operations of our signal paths and has kept them reliable between all our transmission nodes. TSI’s Telecommunications group has also played a key role in OCB’s continuing transition of data circuits and services to the new Networx contract vehicle. This group has also assumed the associated management and customer support services associated with this action. Overall, TSI’s services and support has been critical to much of the success that OCB has enjoyed over the past year in fulfilling their important broadcast mission.”*

**Carlos García-Pérez**  
**Director, Office of Cuba Broadcasting**

*“Among continued excellent support of our transmissions into the Middle East and North Africa, TSI is in the process of developing ‘proof of performance’ field data in Saudi Arabia, which for the first time strike a balance between protecting our mission while significantly reducing transmission costs.”*

**Brian Conniff**  
**CEO, MBN**

*“Many of Voice of America’s successes in FY 2012 are tied to accomplishments by TSI, particularly in important VOA markets. These include:*

- *A satellite-delivered audio channel with a slate driven by RSS feeds puts VOA Mandarin, Cantonese, and Tibetan language radio programming into China with a clear, unjammed signal.*
- *A KU band satellite TV channel on Telstar 18 is giving VOA yet another way to reach the estimated 11% of the Chinese population to receive Mandarin, Cantonese, and Tibetan content, opening the doors to a diversified menu of VOA programming for that market.*
- *Proactive and creative responses to Iranian government jamming of PNN’s satellite broadcasts enabling an important audience continued access to VOA.*
- *Selection and development of Pangea as the new content management system for VOANews.com has given VOA a flexible and scalable platform in which to grow its web and mobile programming.*
- *Four new FM stations in Afghanistan, bringing the total to 12, giving VOA Dari and Pashto programs a wider reach with a clear, FM quality signal...”*

**Steve Redisch**  
**VOA Executive Editor**

*“During the past year, TSI has continued to improve and increase its technical support of RFE/RL. Historically the majority of the support offered by TSI had been concentrated on the delivery of RFE/RL’s broadcast product to geographically diverse transmitter locations via its global satellite network. That support has expanded past those historical bounds into areas of network and IT support and cooperation.*

**Steven Korn,**  
**President and Chief Executive Officer, Radio Free Europe/Radio Liberty**

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## Our Mission

To deliver the critical content distribution and information processing solutions that keep the Broadcasting Board of Governors running and growing.

## Our Vision

Become one of the Broadcasting Board of Governor's core competitive advantages by delivering outstanding business value culled from the industry's best technological solutions and leveraged by the most effective Federal workforce.



## Driving Transformation in FY 2012

Today, the Technology, Services and Innovation (TSI) organization operates at a radically higher level of performance and effectiveness than it did during the analysis and development of the 2010-2012 Strategic Plan.

From the smallest operational detail to the largest strategic projects, the TSI organization has made progress in all of its myriad battle fronts. This “from the ground up” effort has involved every part of the organization and encompassed activities that ranged from laying out proper cabling infrastructures to the most complex implementations of ground-breaking IT and Engineering platforms.

In several areas, TSI implementations have literally leapfrogged the majority of the other Federal Government Agencies in their use of technology, have nurtured the development of new distribution technologies currently used by other broadcasters, and have contributed to the development and deployment of new software that continues to enable unfettered Internet access to hundreds of thousands of individuals living under oppressive regimes that engage in Internet censorship.

The results, keeping in mind the BBG mission, are reflected in unprecedented effectiveness of signal delivery to the most relevant BBG target markets, best ever reliability ratings of its infrastructure, and substantial one-time and recurring cost savings. Where possible, this extensive remediation leapfrogged the market and clearly established TSI as a leading user of some of the most cost-effective technologies and established best practices. This annual report highlights this dramatic evolution.

This enormous body of work would not have been possible without the tireless efforts of the TSI team. Their willingness to innovate, cut costs, and proactively find solutions to ensure that audiences around the world have access to news and information is commendable and inspiring.



A handwritten signature in black ink, appearing to read 'Andre Mendes'.

**André V. Mendes**

CIO/CTO , BBG

Director, Technology, Services, & Innovation, IBB

# Our Operations

## Customers

- 3,500+ BBG employees
- 5 Broadcast Entities
- 59 language services
- 50+bureaus, production centers, & overseas offices
- Global audiences in excess of 175 million people

## Transmission Network

- 80+ BBG Transmitting Sites
- 15 geo-stationary satellites
- 1,400+ affiliate stations
- Circumnavigating Fiber Circuits
- Rapidly expanding global MPLS network
- 1 Continuity of Operations Facility (COOP)

## Team:

- Engineering Staff: 80 (66 at HQ, 14 in Greenville)
- IT Staff: 73
- Foreign Service Nationals: 265
- Foreign Service Officers: 16
- Resources Staff: 17
- CIO Staff: 13

## IT Assets

- 200+ Enterprise Servers
- Over 1 petabyte of online storage
- Multiple Broadband Internet Connections
- Enterprise Class networking equipment
- Over 2,700 workstations
- 400+ mobile devices
- Largest DaletPlus installation in the world
- Responded to 18,000+ help requests

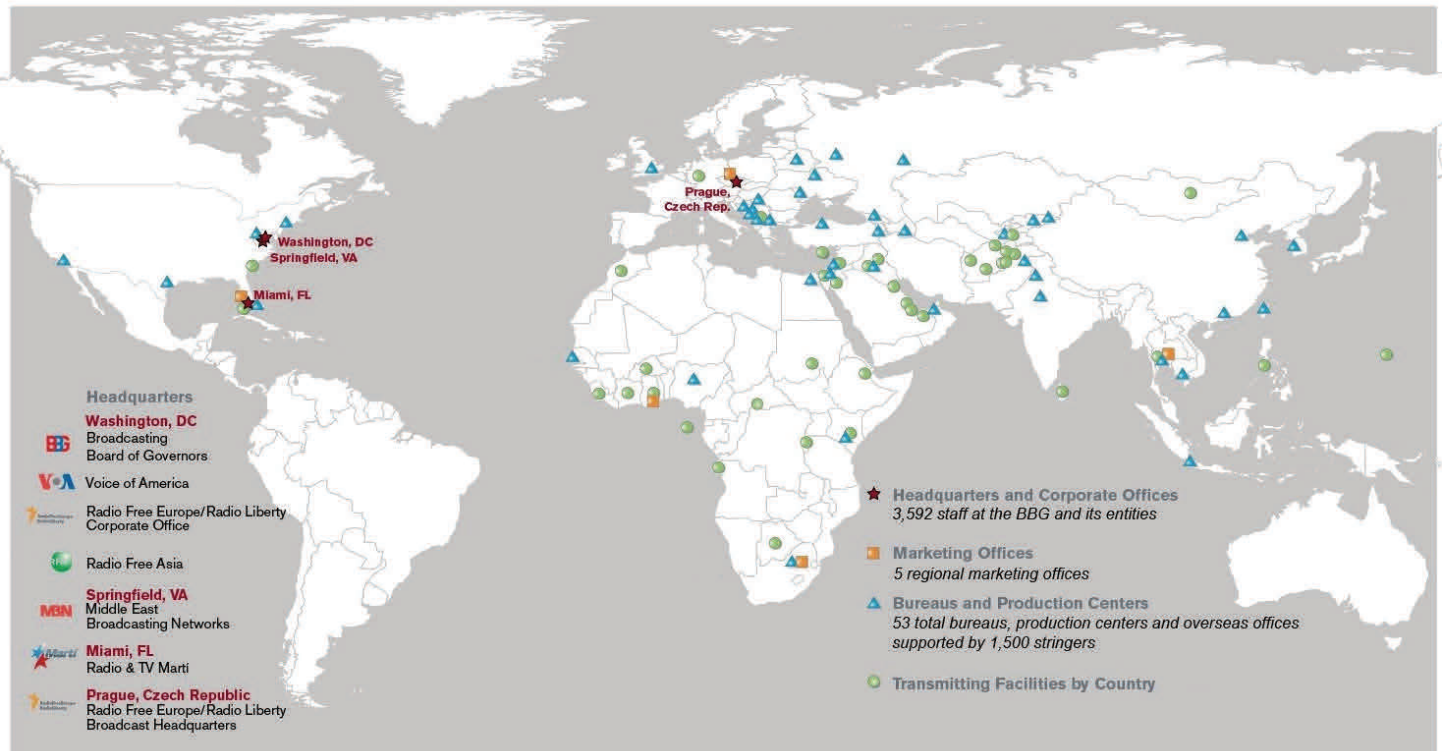
## Improving Broadcast Delivery

TSI's primary mission is to distribute content created by the BBG's broadcasters to their intended audiences in the most cost-effective and efficient manner possible. In FY 2012, significant improvements were achieved in the quality of BBG signals serving several high priority countries such as China, Iran, Afghanistan, Libya, and North Korea.

**China:** With the recent addition of VOA's WeiShei Channel to the VOA and RFA Mandarin and Tibetan Radio with Slate services to Telstar 18, TSI is delivering the best complement of signals ever into the Chinese mainland. The most popular satellite in China, Telstar 18 provides RFA and VOA with access to the ever increasing number of Chinese who that own a satellite dish (11% as of 2009), CD quality audio and the best price performance ratio of any platform in the BBG arsenal. These three services cost \$750,000/year, an amount dwarfed by our expenditures on other far less effective broadcasting into China. Additionally, there has been a steady increase in Chinese Internet traffic enabled by the BBG's increased investment in several Internet Anti-Censorship tools.

**Iran:** The deployment of Radio with Slate services on Hotbird and Eutelsat 7A has heralded yet another substantial increase in the quality of the signals served into Iran. PNN is being delivered on 5 satellites, including Hotbird (#1 in Iran), Telstar 12, Asiasat-3, Eutelsat 7A, and Eutelsat 25A. Radio Farda is distributed on Hotbird, Telstar 12, Asiasat-3, Nilesat, Arabsat, Eutelsat 7A, and NSS-12. There has also been a steady Iranian-based Internet traffic enabled by the introduction of new tools (Psiphon 3) and additional investment in the (The Onion Router) TOR system.

## Worldwide Facilities



## Improving Broadcast Delivery, Continued

**Afghanistan:** In FY 2012, four new FM VOA and RFE/RL facilities were installed in Ghazni, Lashkar Gah in the Helmand Province, Pol-e-Alam in the Lowgar Province, and in Qalat in the Zabol Province. Installation of these four transmitters brought the total number of sites in Afghanistan to 12 with three additional transmitters in the country and awaiting installation. In addition, the Khost medium wave transmitter operated 18 hours a day with outstanding reliability, a remarkable accomplishment considering the transmitter's location and the difficulty associated with its diesel supply, availability of parts, and general operation.

**Libya:** Following the October 2011 deployment of a TSI FM transmitter in Benghazi, Libya, Radio Sawa, operating at 88.1 MHz, quickly became the #1 station in the city. That installation was followed with a successful deployment in country's capital Tripoli. Operating at 106.6 MHz, this TSI FM transmitter provides outstanding coverage of the largest Libyan metropolis. Currently, equipment for a third station to be built in Misratah is housed in Benghazi and awaiting deployment to Misratah when the security situation so allows.

**North Korea:** The one megawatt AM leased transmitter in Ussuriysk, Russia blankets the entire Korean Peninsula with the strongest signal ever deployed by the BBG in this most restrictive state. This powerful medium wave transmitter carries five hours of RFA and two hours of VOA Korean programming.

## Key Focus Areas

To support the TSI Strategic Plan in achieving the Strategic Objectives, four focus areas were identified for both the Engineering and Information Technology Directorates. In FY 2012, TSI focused on these areas to achieve the objectives laid out in the Strategic Plan. TSI's efforts centered on:

### 1. Platform Consolidation

By selecting a set of platform standards for the entire organization and systematically migrating systems and applications from other platforms into these standard environments, TSI has very quickly consolidated its operating base, simplified systems integration, and developed deeper staff technical knowledge.

### 2. Platform Virtualization

By leveraging server, storage, and networking virtualization, the BBG has substantially increased capital investment performance. Virtualization has become the highest priority in the Federal IT space, and a government-wide virtualization process is underway. BBG is now one of the leading agencies in this arena.

### 3. Systems Co-location




By co-locating systems in high availability data centers specifically designed with multiple redundancy layers, the BBG can effectively leverage much higher expected levels of infrastructure reliability than it is likely to achieve with its own dedicated investment. RFE/RL's Prague building exhibits these desirable characteristics.

### 4. Computing in the Cloud

By leveraging cloud computing, BBG can better leverage its staff with higher level tasks unique to the BBG that pertain directly to the accomplishment of its primary mission.

## Key Transmission Metrics

Emphasis on the four focus areas continued to reap benefits as TSI realized improvements in each of the three key transmission metrics over FY 2011. Of note, TSI successfully reduced the transmission network consumable expenses while increasing the radio signal strength and satellite effectiveness.

Key Performance Metrics	Definition	FY	FY	FY	FY	FY	
		2008	2009	2010	2011	2012	
Radio Signal Strength Index	Applies to cross-border shortwave and medium wave radio signals and measures whether programs can be heard by target audiences (based on a 5-point scale).	2.65	2.74	2.80	2.92	2.97	
Satellite Effective Index	Assesses whether the BBG satellite delivery is keeping pace with global media developments.	9.8	10.4	10.4	10.9	11.6	
Transmission Network Consumable Expense	Reflects the cost of power and parts (in millions) to operate the global IBB transmitter network.	\$34	\$34	\$35	\$35	\$32	

# FY 2012 Strategic Objectives

The 2010-2012 BBG Technology Strategic Plan established strategic objectives for Information Technology and Engineering Operations. The strategic objectives form an integrated model for success that allowed the Agency to make substantial progress in reaching out to the BBG's global audience in the most cost effective and reliable manner possible.

## 1. Increase the Reliability of Operating Systems

The BBG's worldwide operations and the 24/7 nature of the media industry require a very high level of availability and an increasingly interconnected, sophisticated global infrastructure. TSI must find ways to ensure redundancy, proactively problem solve, and ensure that operating systems are operational 100% of the time.

## 2. Lower Operating Costs

In an era of declining budgets, all TSI elements must continually work together to identify new and innovative ways to consistently deliver on the TSI mission while having access to fewer and fewer resources. TSI must relentlessly examine the cost structure and ruthlessly weed out ineffective assets, systems, and workflows.

## 3. Increase Operating Agility

As global media landscapes continue to evolve and the geo-political situation shows no evidence of stabilizing, TSI must constantly identify new and innovative ways to meet the growing and shifting content consumption habits of the BBG's strategic target audiences.

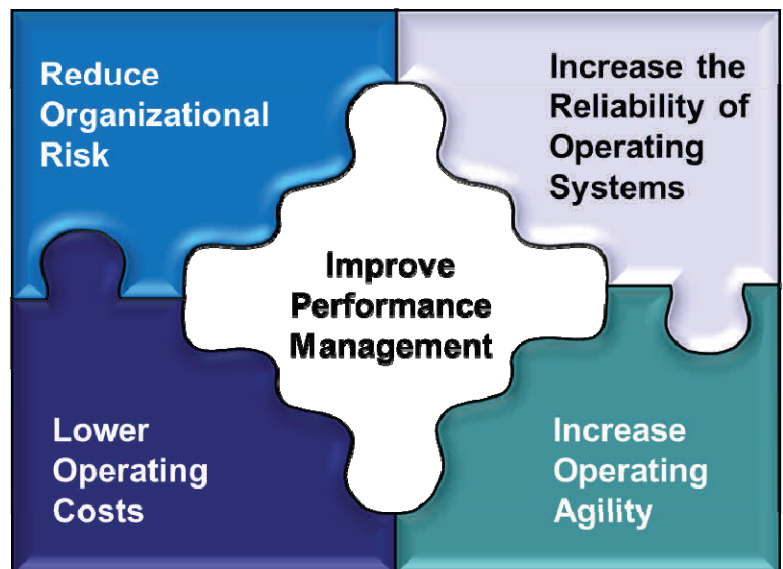
## 4. Reduce Organizational Risk

TSI must ensure seamless operation of the entire BBG Technology infrastructure in the face of cyber-security, accidental disruption, natural disasters, and other internal and external threats to ongoing business continuity.

## 5. Improve Performance

### Management

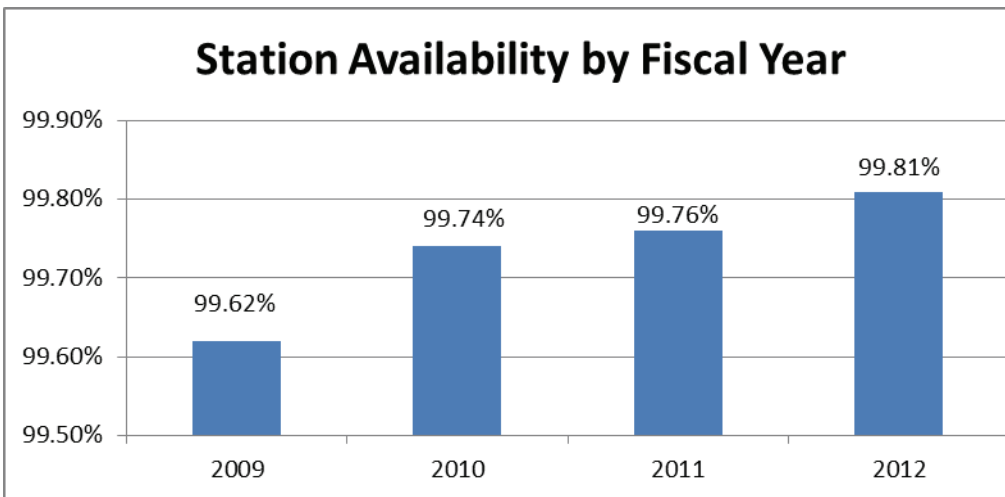
TSI employees are the cornerstone of success. TSI must ensure that the team is trained, engaged, and focused on the ways in which each person contributes to the Agency's mission. TSI seeks to become the best place to work, learn, and contribute within the Federal Government.





# Increase the Reliability of Operating Systems

The substantial investments in remediation efforts in over the past two years allowed the BBG technical infrastructure to experience a drastic improvement in its availability ratings. For the transmitting stations, a combination of repairs, deployment of new transmission techniques, and the outstanding dedication of the overseas and headquarters staffs have led to increasing availability ratings despite insufficient Maintenance and Repair budgets and the harshness of some of our operating environments (e.g., Djibouti and Khost). Since 2009, the number of missed broadcasts has been cut in half with over 1,000 hours of downtime eliminated. In 2012, the transmitting stations were up and operating 99.81% of the time.



*The increase in station availability from 2009 to 2012 resulted in a decrease in downtime of more than 1,000 hours.*

The Engineering team was not only responsible for daily operations of the Agency's transmission stations but embarked on several major projects to improve operations. The multi-year project to paint all of the towers on Saipan and Taiwan was completed, and the Sao Tome roofing project for the replacement roofs on the Transmitter and Administrative Buildings was completed. The Engineering team also conducted a two-week course on radio frequency circuits for teams from the transmission sites in Iranawila, Poro, Saipan, Tinang, and Tinian to update and upgrade skill levels.

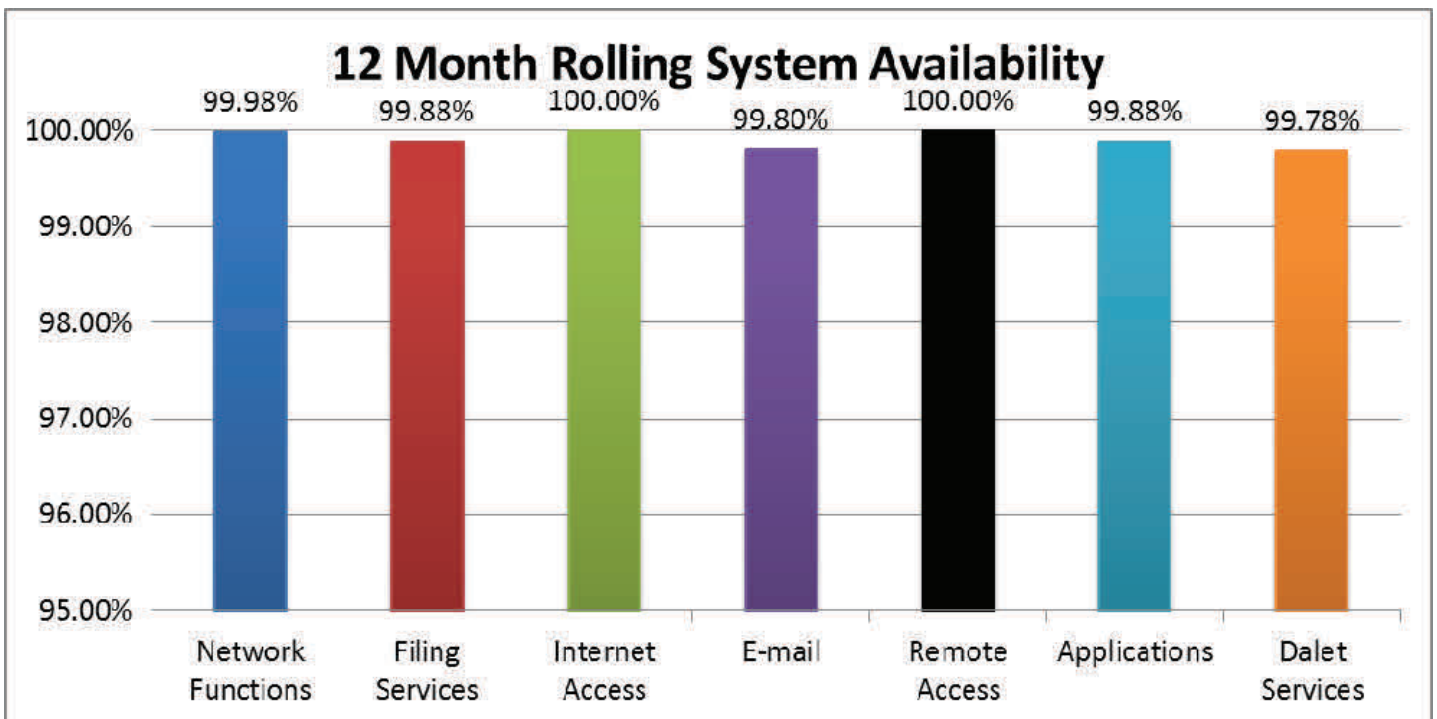
In addition to operating the BBG's transmitting stations, the Engineering team also sought to improve the reliability of the affiliate stations. In FY 2012, the team rebuilt the Agency's entire FM infrastructure in Haiti, which was severely damaged during the 2010 earthquake. This effort required several trips to Haiti and involved the rebuilding and upgrading of 14 affiliate stations, which included rebuilding studios, transmission plants, and towers throughout the country.



Satish Bhatia works with 93.7 FM in Haiti to rebuild transmitters damaged during the 2010 earthquake.

# Increase the Reliability of Operating Systems

The Information Technology Directorate took steps to dramatically improve the reliability of the IT infrastructure. The Agency's Internet connectivity was drastically improved by moving from a two legacy 45 Mbps circuit to two, fully redundant 100 Mbps circuits, virtually eliminating the myriad of latency problems that had plagued the Agency for several years. Extensive re-wiring efforts eliminated thousands of troubled connections, and the deployment of enterprise class storage virtualization platforms enabled the retirement of multiple obsolete storage platforms reducing the number of storage vendors from eight to three. Additionally, the enterprise server virtualization allowed over 100 obsolete servers to be retired. Seamless outsourcing of the email platform into a cloud-hosted solution has provided outstanding availability and introduced the highest levels of functionality and integration with the increasingly important mobile platforms. These efforts led to improvements in the 12 month rolling system availability metrics. Notably, while the Dalet Service's availability substantially increased from FY 2011 levels (99.5%), because of this application's high visibility and mission critical nature, this increase was not yet enough to be considered operating at an enterprise level. However, since the early FY 2013 upgrade to the latest version of the application, v. 3.5, the availability and overall performance of the Dalet System has now risen to levels comparable to the other IT platforms depicted below.



Effectively, the BBG is now operating in one of the most advanced Information Technology infrastructures in the entire Federal Government, and the increase in functionality and reliability of the BBG's environment is now clearly on par with the highest levels of enterprise operations.

# Lower Operating Costs

In an era of declining budgets, all groups within TSI worked to identify potential cost savings. FY 2012 saw the realization of a number of cost savings projects. These savings, as well as transmission rationalization cost reductions, were made possible by the Resource Directorate's handling of all budgetary exercises, including the extremely complex and iterative calculations of the financial and operational impacts of proposed and enacted language service and transmission cuts. A few of the notable projects that led to significant cost savings include the following:

- **\$216,000 annually** For several years, the Agency has leased a generator. The Facilities Division completed a project to purchase a generator to replace the leased unit in the Cohen Building's surface parking lot. The procurement resulted in a contract that allowed the Agency to discontinue the \$18,000 a month payment for the rental generator.
- **\$400,000 annually** The Satellite Division guided the Office of Cuba Broadcasting through a re-compete of the Hispasat service contract which saved \$400,000 annually.
- **\$400,000 annually** TSI has migrated from expensive satellite and dedicated fiber circuits to more flexible and cheaper MPLS circuits which generated a savings of at least \$400,000 per year.
- **\$1,500,000** The implementation of a new transmission protocol, Amplitude Modulation Componding (AMC), generated savings of nearly \$1.5 million across the BBG transmitting stations. In addition, by allowing for the operation of the high power transmitters at lower power levels, TSI expects to substantially diminish ongoing wear and tear on the equipment and lower the replacement requirements for very expensive tubes and capacitors and their associated shipping and handling.
- **\$850,000 annually** In close collaboration with RFE/RL, ODDI, VOA, MBN, and OCB, TSI provided executive and project management expertise in migrating four out of the five BBG entities to a common Content Management System, Pangea. The project resulted in immediate savings of \$450,000 in year one, as well as an additional \$400,000 savings for mobile websites. In FY 2013 and beyond, this project is anticipated to save the Agency approximately \$850,000 annually. The credit for these future savings clearly resides with the four broadcast entities and ODDI as TSI's role finished at the project's on-time, on-budget, successful conclusion.
- **50% reduction** The Enterprise Telecommunications Division serviced and upgraded the main PBX which allowed the Agency to move into a Voice-over-IP strategy that will potentially cut overall telecommunications costs by 50%. This strategy is being piloted with the introduction of Skype to several VOA language services. The pilot focused on Afghanistan, Burma, and Vietnam and resulted in an 80% reduction in the cost per call.

# Increase Operating Agility

In FY 2012, TSI continued to take the lead in identifying innovative new ways to extend the reach of broadcasts and better support the Agency's journalists.

**Satellites:** The Satellite Division continued its stellar record of reliability, despite multiple and highly complex migrations to new transmission protocols and encoding schemas, deployments onto new space crafts, introduction of new content channels, and massive upgrades of legacy mono radio circuits into new higher fidelity stereo signals. The Satellite Division developed a unique one-way IP content distribution via satellite that will enable Iranian citizens to download and distribute web content otherwise not available via the censored Iranian Internet gateways. TSI also established new satellite options for VOA and RFA broadcasts into China including both TV and Radio with Slate options. The Satellite Division also adeptly dealt with numerous satellite jamming issues, including establishing a backup service for Hot Bird on Eutelsat 9A.

**Information Technology:** The Destiny Follet Library Management solution was deployed last year to help the Video Archive Service manage their vast collection of video and audio tapes. AP Newswire delivery was transferred from satellite to web-based feeds, and storage and workflows were altered to use VOA 70 Image Elements in Dalet 5.1e and DaletPlus. The IT team facilitated on-site access to the FirstCom Production Music Library which is transitioning to a cloud-based environment. This change allowed the IT Directorate to reclaim 1.5 terabytes of storage. Notably, the IT team automated the manual process of extracting discrete audio channels from TV reports generated by Central News. While it used to take one staff member at least two hours each day to accomplish this task, the new process requires no human intervention. The IT Directorate also worked extensively with Dalet on upgrades, new products, and new workflows. One such change was the establishment of migration rules in DaletPlus which allowed for web-ready files from the English Webdesk to be produced automatically. IT's Computer Systems Support Division began conducting Windows 8 demonstrations and exploring ways to incorporate the new operating system into the Agency's workflows. Finally, TSI began assessing a portable solar and/or wind powered communications WiFi hotspot that was designed and produced by the University of Michigan's Department of Applied Astrophysics.

**Radio:** The Engineering team continued to conduct FM ducting studies to identify new location and frequency possibilities for FM broadcasts into Cuba while also exploring the idea of using a medium wave transmitter based in Haiti to broadcast into Cuba. The team also implemented a cellphone application to gather FM radio signal strengths and map them in a web server. This application was piloted in South Sudan, Mali, and Chad. The team also developed a FM Radiation Hazard graphical user interface for the desktop.



**Internet Anti-Censorship:** Thanks to a substantial increase in funding for Internet Anti-Censorship (IAC) activities, TSI launched a variety of new projects. The funds allowed the IAC group to expand anti-censorship circumvention software, servers and bandwidth (Ultrasurf, TOR, and Psiphon). Funds were used to target China, Cuba, and Iran with e-mail, SMS, and Social Networking efforts. New mobile anti-censorship circumvention applications were developed for the iPhone, Android, and Symbian operating systems. The IAC group, in collaboration with others, developed a new satellite-based TV and Radio Streaming and Internet Access system to be used in countries where Internet access infrastructure is either non-existent or severely constrained. Finally, the IAC Division sponsored studies focused on existing risks in the mobile infrastructure (with Freedom House) and an analysis of all known Internet censorship circumvention tools available in the market (Intelligent Decision Partners) to ensure that research will determine future investments.

**Peach** ([peach.bbg.gov](http://peach.bbg.gov)) To accommodate the ever-growing need for faster file transfers and efficient content sharing, IT's Computer Systems Support Division developed a web-based file upload and sharing service. This high availability, cloud-based service has multiple geographic locations for file uploads and takes advantage of a centrally stored metadata repository. By strategically positioning service availability closer to BBG correspondents and affiliates, Peach improves speed in delivering original content to Washington headquarters, BBG bureaus, and affiliates around the world. The service will work with all operating systems and does not require any additional software installation. Peach also delivers transcoding cloud services that enable its users to quickly transcode their original videos to multiple formats concurrently without using local computer resources. In addition, Peach is able to transcode 99% of all available formats today to a format that facilitates linear editing. A beta version of Peach was deployed to several VOA Language Services and to the VOA Central Newsroom for evaluation and testing. Preliminary results are encouraging, and feedback from BBG testers will be used to make Peach more powerful yet easy to use.

**Work Space:** While executing more than 100 office moves, managing more than 1.3 million square feet of space, and responding to more than 8,000 trouble calls, TSI's Facilities Branch led the creation of the next-generation shared office space environment that will revolutionize the way the Agency operates and will change the perception of shared spaces in the workplace.

## Reduce Organizational Risk

TSI undertook a variety of projects in FY 2012 designed to reduce risk. One of the most visible projects throughout the Agency was the introduction of the Communicator! NXT system which is capable of sending validated emergency alerts to Agency personnel via email, text message, and phone calls. Agency staff began registering to use this new emergency notification system in March 2012.

**Information Technology:** The IT Directorate worked to stabilize DaletPlus by virtualizing the core services to provide redundancy and faster disaster recovery, by redistributing DaletPlus services, and by segregating use facing processes from the backend services to minimize the potential impact on the end user. The IT Directorate also upgraded the Medway system for better stability and integration between Avid and DaletPlus. Additionally, the IT Directorate upgraded the Operating Systems, authentication servers, and database servers to the latest available versions leading to the retirement of dozens of permutations and the concomitant decrease in operational complexity. The IT Directorate also launched a new Agency customer relationship management solution known as Footprints. This web-based solution provides the Agency with extensive incident management, problem management, change management, and asset management capabilities. In addition, Footprints provides a logical platform for groups to work cooperatively together to resolve issues or plan joint projects. The solution allows the Customer Systems Support Division to remotely control features of the Asset core toolset to quickly help end users without leaving their workstations, resulting in faster problem resolution times.

**Security:** Several new security measures were put in to place to strengthen the Agency's IT security. A pilot project was launched to install a new malware-blocking tool on all of the work stations in the Tibetan service. This tool, called the "Bit 9 Whitelisting Solution," keeps all non-authorized code from running on the machine. The Security group selected Sophos as the Agency's new anti-virus protection client, and it has been deployed throughout Cohen building. With the robust reporting system and daily updates, Sophos has greatly reduced disruptive and malicious malware workstation infections.

**Satellites:** The Satellite Division implemented a new, state-of-the-art Monitoring and Control system that, in real time, monitors the status of thousands of network and transmission components and automatically deploys redundant systems as soon as a failed component is encountered. Reacting in seconds rather than requiring human notification and remediation, this system is already providing higher levels of reliability throughout the entire distribution chain.

## Improve Performance Management

In FY 2012, TSI placed a new emphasis on improving performance management. While TSI saw gains in the Federal Employee Viewpoint Survey from 2010 to 2011, employee feedback was used to develop new programs to award excellence, identify skill gaps, and begin increasing training opportunities.

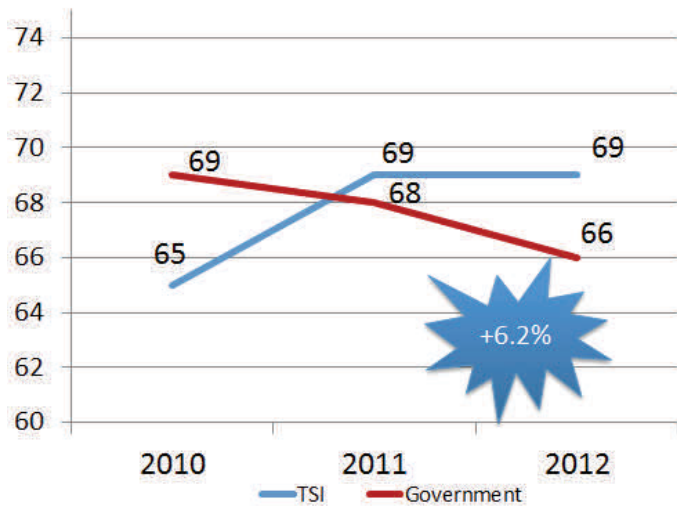
In 2011, TSI noticed substantial improvements in how TSI employees viewed job satisfaction, leadership and knowledge management, talent management, and the performance culture. TSI is proud to note that employees noted additional improvements in FY 2012.

In an innovative effort to recognize and reward excellence, TSI launched the TSI Employee of the Quarter, a new peer-nominated and peer-selected awards program. Each quarter, five finalists are nominated by TSI staff, and a rotating review Committee selects the top five candidates. All Federal TSI employees vote to select the winner. Each winner receives a tablet computer valued up to \$600 (or the equivalent cash), and each finalist receives a cash award of \$250. In FY 2012, Daniel Maxwell, Marcia Jones, and Thomas Jackson were selected as the first three recipients. Mr. Maxwell was recognized for his paper and presentation at an international conference; Ms. Jones was recognized for her work managing HR, budget, and procurement for all of the IT divisions; and Mr. Jackson was lauded for his outstanding customer service.

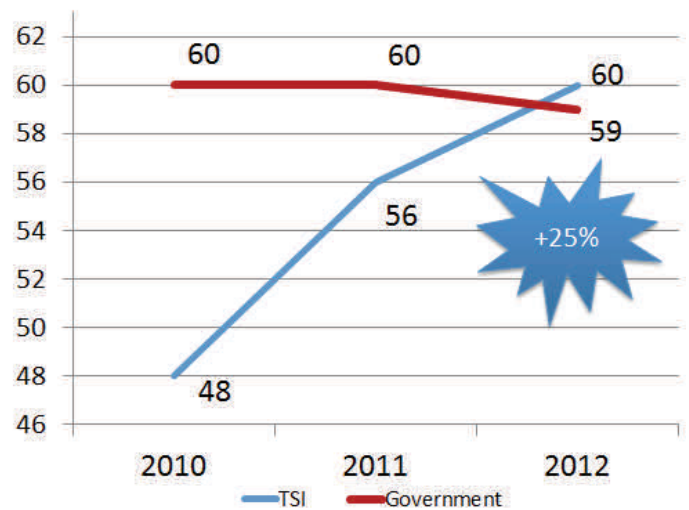
TSI also launched a process to identify skills and skill gaps so that future hiring and training needs can be made based on a better understanding of existing skill sets. TSI also launched new training programs, including one for radio frequency circuits at overseas facilities and another on Project Management. The Project Management Division created an agency-wide Project Management training series that will offer general survey classes of the Project Management field as well as more specific Project Management courses. These courses will launch in the first quarter of FY 2013.

## Federal Employee Viewpoint Survey Results, 2010-2012

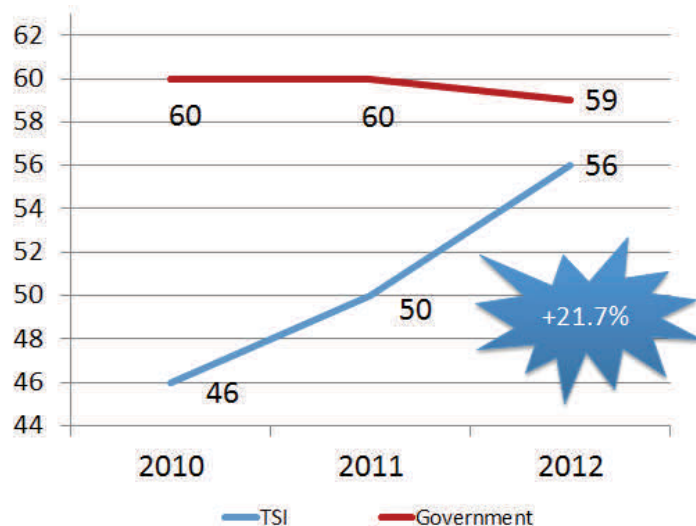
### Job Satisfaction



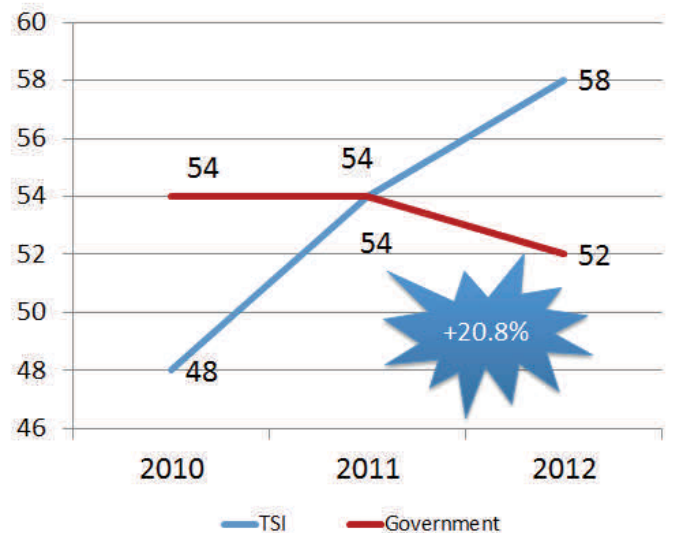
### Leadership and Knowledge Management



### Talent Management



### Results-Oriented Performance Culture



## FY 2012 Gold Medal and QSI Award Winners



Christine Brown



Veris Burton



Haoying Chen



Christoph Cholewa



Piero Ciancio



Hemantha Edirisinghe



James French



Horst Frick



Clifford George



Kristy Hays



Nicole Jimmerson



John Johnson



Jonathan Long



Nelson Lima Neto



David Shiben



Robert Simpson



Quinton Sowell



Gerhard Straub



Mitchell Wong



# What's Next

Over the past two years, the TSI team has been intensely focused on remediating the basic technical infrastructure of the BBG. Now that this remediation is nearly complete, we can shift our emphasis from constantly fighting fires to optimizing the newly redesigned environment.

The forthcoming 2013-2014 TSI Strategic Plan will focus on how TSI can add additional value to the Agency by redefining and optimizing the BBG content supply chain. From content acquisition and manipulation, to content packaging and distribution, we must ensure operational coherence. This will provide the broadcast entities with data driven operational control. It will also allow each individual language service to be agile and granular with distribution options so that the best and most cost effective content delivery methodologies are used.

## 2013-2014 Strategic Plan: Optimizing the BBG Content Supply Chain

Throughout the world, media consumption patterns are rapidly changing. This change manifests itself in the BBG target markets in a variety of different ways. From the rapid expansion of satellite dish ownership in China, Southeast Asia, and Africa to the astonishing global explosion in mobile phone usage, today's information delivery pathways have little resemblance to those from 10 years ago.

This constant technological churning will not subside. Innovation will accelerate, new platforms will arise, audiences will continue to fragment while also creating more content, and competition for ears and eyeballs will increase. To keep pace and maintain relevance, the BBG must rapidly evolve into a modern, global, multi-media enterprise possessing an operational agility that can only come from supply chain optimization

From our people and space, to our systems and processes; from our content ingest and tagging, to our global backhaul and final delivery to the consumer; everything in our environment must be logically aligned and cost effectively operated. Routinely, the BBG will have to analyze market data and react accordingly by modifying and adapting its content supply chain.

It is the optimization of this holistic environment that TSI, in close collaboration with the broadcast entities and its BBG colleagues, endeavors to design, develop, and deploy, using the state-of-the-art infrastructure that it has been creating over the past two years. The BBG mission deserves nothing less.



BBG Content Supply Chain



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Board of  
Governors**



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